ENERGY NORTHWEST

P.O. Box 968 ■ Richland, Washington 99352-0968

October 22, 2002
GO2-02-174

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: **COLUMBIA GENERATING STATION, DOCKET NO. 50-397
LICENSE AMENDMENT REQUEST TO ELIMINATE REQUIREMENTS
FOR POST ACCIDENT SAMPLING SYSTEM (PASS)**

Dear Sir or Madam:

Pursuant to 50.90, Energy Northwest hereby submits a request for amendment to Columbia Generating Station Operating License NPF-21. The proposed amendment deletes the program requirements of Technical Specification (TS) 5.5.3, Post Accident Sampling. The change is consistent with NRC approved Industry/Technical Specification Change Traveler, TSTF-413, Elimination of Requirements for a Post Accident Sampling System (PASS). The availability of this TS improvement was announced in the *Federal Register* on March 20, 2002, as part of the Consolidated Line Item Improvement Process (CLIIP). As discussed in the model safety evaluation regarding collateral changes to the TS, this proposed license amendment requests revision to TS 5.5.2, Primary Coolant Sources Outside Containment. This amendment also includes a request to eliminate an Operating License condition associated with PASS.

Energy Northwest requests approval of the proposed changes by March 1, 2003, with the amendment being implemented 60 days thereafter. The requested approval date was administratively selected to allow for NRC review, and the implementation date was selected to allow for revision of the necessary documentation to reflect elimination of PASS requirements.

A001

In accordance with 10 CFR 50.91, the State of Washington has been provided a copy of this letter.

Should you have any questions or require additional information regarding this matter, please contact Ms. CL Perino, Licensing Manager at (509) 377-2075.

Respectfully,

W. W. Coleman for

DK Atkinson
Vice President, Technical Services
Mail Drop PE08

Enclosures:
1. Notarized Affidavit
2. Evaluation of the proposed change

Attachments:
1. Proposed Technical Specification and Operating License Change (mark-up)
2. Proposed Technical Specification and Operating License Change (retyped)
3. List of Regulatory Commitments

cc: EW Merschoff - NRC RIV
BJ Benney – NRC NRR
NRC Sr. Resident Inspector – 988C
DL Williams - BPA/1399
TC Poindexter - Winston & Strawn
JO Luce - EFSEC

Enclosure 1

STATE OF WASHINGTON)
)
COUNTY OF BENTON)

Subject: Amendment Request Eliminate PASS Requirements

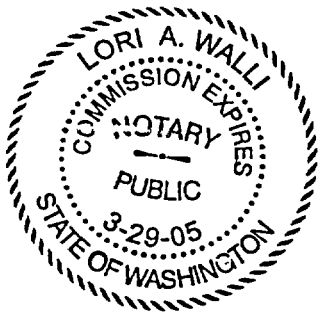
I, D. W. Coleman, being duly sworn, subscribe to and say that I am the Acting Vice President, Technical Services, for ENERGY NORTHWEST, the applicant herein; that I have the full authority to execute this oath; that I have reviewed the foregoing; and that to the best of my knowledge, information, and belief the statements made in it are true.

DATE October 22, , 2002

D. W. Coleman
D. W. Coleman
Acting Vice President, Technical Services

On this date personally appeared before me D. W. Coleman, to me known to be the individual who executed the foregoing instrument, and acknowledged that he signed the same as his free act and deed for the uses and purposes herein mentioned.

GIVEN under my hand and seal this 22nd day of October 2002.



Lori A. Walli
Notary Public in and for the
STATE OF WASHINGTON

Residing at Benton County

My Commission Expires 3-29-05

1.0 DESCRIPTION

Pursuant to 50.90, Energy Northwest hereby submits a request for amendment to Columbia Generating Station Operating License NPF-21. The proposed amendment deletes the program requirements of Technical Specification (TS) 5.5.3, Post Accident Sampling. In addition, the proposed amendment makes collateral changes to TS 5.5.2, Primary Coolant Sources Outside Containment and Operating License Condition 2.C.(13).

2.0 PROPOSED CHANGE

The proposed license amendment deletes the program requirements of TS 5.5.3, Post Accident Sampling. This section of the TS currently reads as follows:

5.5.3 Post Accident Sampling

This program provides controls that ensure the capability to obtain and analyze reactor coolant, radioactive iodines, and particulates in plant gaseous effluents and containment atmosphere samples under accident conditions. The program shall include the following:

a. Training of personnel;
b. Procedures for sampling and analysis; and
c. Provisions for maintenance of sampling and analysis equipment.

3.0 BACKGROUND

The deletion of PASS requirements is consistent with NRC approved Industry/Technical Specification Task Force (TSTF) Change Traveler, TSTF-413, Elimination of Requirements for a Post Accident Sampling System (PASS) (Reference 1). The availability of this TS improvement was announced in the *Federal Register* Volume 67, No. 54, on March 20, 2002 as part of the Consolidated Line Item Improvement Program (CLIIP) (Reference 2).

4.0 TECHNICAL ANALYSIS

4.1 Applicability of the Published Safety Evaluation

The technical evaluation of this change is contained in NEDO-32991, "Regulatory Relaxation for BWR Post-Accident Sampling Stations (PASS)," dated August 2001 (Reference 3). The results of this evaluation confirmed that the PASS does not provide the benefits expected when the requirements were imposed following the Three Mile Island Unit 2 accident. Operating experience has demonstrated that in-plant instruments in conjunction with analysis methods based on known fuel release characteristics are as good as or better than PASS for collecting and assimilating information to assess core damage following an accident. Energy Northwest agrees with the technical conclusions contained in the NEDO report.

Energy Northwest has performed a review of the NRC staff's safety evaluation published on December 27, 2001, as part of the CLIIP (Reference 4). A review was also performed of NRC staff's safety evaluation dated June 12, 2001, for the BWR Owners Group NEDO-32991 report (Reference 3). Energy Northwest concludes that the safety evaluations performed by the NRC staff are applicable to Columbia Generating Station and support this license amendment request.

Energy Northwest is not proposing any variations or deviations from the technical specification changes described in TSTF-413 or the NRC staff's model safety evaluations.

4.2 Collateral Changes

4.2.1 Operating License Proposed Change

It is proposed that Operating License (OL) Condition 2.C.(13) be deleted. This condition states:

(13) Post-accident Sampling (TMI Item II.B.3, Section 9.3.2-4, SER, SSER #4, SSER #5)

Prior to May 1, 1994, the licensee shall install, test and have operational the reactor coolant dissolved gas grab sampling capability.

Operating License Condition 2.C.(13) was issued as part of Amendment No. 1 to Facility Operating License NPF-21 on April 13, 1984 (Reference 5). The NRC evaluated this change in Supplement No. 5 to the SER also issued on April 13, 1984, (Reference 6). A typographical error is present in the current Operating License as the stated date of May 1, 1994, should read May 1, 1984. This Operating License Condition is part of the PASS and should be considered a collateral change to the CLIIP.

4.2.2 Primary Coolant Sources Outside Containment

Columbia Generating Station TS currently include an administrative requirement for a program to minimize the leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident. The PASS falls under the scope of this requirement. As described in the Staff's model safety evaluation published on December 27, 2001, (Reference 4), a modification might be implemented such that the PASS would not be a potential leakage path outside containment. Since the modification, if implemented, may not be completed during the implementation period for this amendment. Technical Specification 5.5.2 is being revised to add a parenthetical phrase following the listing for the "process sampling" system to assure that "(the program requirements shall apply to the Post Accident Sampling System until such time as administrative

controls provide for continuous isolation of the associated penetrations(s) or a modification eliminates the potential leakage path(s))." This change provides clarification of the intent that the programmatic requirements of TS 5.5.2 will remain applicable to the PASS as long as it is a possible leakage path. The change reflects the fact that the programmatic controls will no longer be applicable if (1) appropriate administrative controls are put in place to provide for continuous isolation of the associated primary containment penetrations(s) or (2) a modification of the piping systems eliminates the associated leakage path(s). In addition, the change accommodates the scheduling of the actual modification such that it may extend beyond the implementation period for this amendment. This change to TS 5.5.2 is consistent with the staff's Safety Evaluation associated with TSTF-413 for the Nine Mile Point Nuclear Station, Unit No. 2, dated August 9, 2002 (Reference 7).

5.0 REGULATORY SAFETY ANALYSIS

5.1 No Significant Hazards Determination

Columbia Generating Station has reviewed the no significant hazards consideration determination published in the *Federal Register* on December 27, 2001 as part of the CLIIP (Reference 4). Columbia Generating Station has concluded that the determination presented in the notice is applicable and the determination is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a). Columbia Generating Station concludes that operation in accordance with the proposed change to the TS and Operating License does not involve a significant hazards consideration.

5.2 Verification

As discussed in the model safety evaluation published in the *Federal Register* on December 27, 2001, for this TS improvement (Reference 4), plant-specific verifications were performed and the results are as follows:

1. Columbia Generating Station will maintain contingency plans for obtaining and analyzing highly radioactive samples of reactor coolant, suppression pool, and containment atmosphere. The contingency plans are maintained in plant procedures. Establishment of contingency plans is considered a regulatory commitment.

2. Columbia Generating Station will maintain the capability for classifying fuel damage events at the Alert level threshold. This capability may utilize the normal sampling system and/or correlations of radiation readings to radioisotope concentrations in the reactor coolant. This capability is described in plant procedures. The capability for classifying fuel damage events at the Alert level threshold is considered a regulatory commitment.

3. Columbia Generating Station will maintain I-131 site survey detection capability, including the ability to assess radioactive iodines released to offsite environs, by using effluent monitoring systems or portable sampling equipment. This capability is described in plant procedures. The capability to monitor radioactive iodines is considered a regulatory commitment.

6.0 ENVIRONMENTAL CONSIDERATIONS

Columbia Generating Station has reviewed the environmental evaluation published in the *Federal Register* on December 27, 2001, as part of the CLIIP (Reference 4). Columbia Generating Station has concluded that the determination presented in the notice is applicable and the determination is hereby incorporated by reference.

Columbia Generating Station concludes that operation in accordance with the proposed change to the TS and Operating License does not require an environmental impact statement or environmental assessment pursuant to 10 CFR 51.22(b).

7.0 REFERENCES

1. Industry Technical Specification Task Force (TSTF) Change Traveler TSTF-413, "Elimination of Requirements for a Post Accident Sampling System (PASS)," June 27, 2001.

2. Federal Register, Vol. 67, No. 54, "Notice of Availability of Model Application Concerning Technical Specification Improvement to Eliminate Post Accident Sampling Requirements for Boiling Water Reactors Using the Consolidated Line Item Improvement Process," March 20, 2002.

3. Boiling Water Reactor Owners' Group Licensing Topical Report, NEDO-32991-A, "Regulatory Relaxation for BWR Post-Accident Sampling Stations (PASS)," August 2001.

4. Federal Register, Vol. 66, No. 248, "Notice of Opportunity to Comment on Model Safety Evaluation on Technical Specification Improvement to Eliminate Post Accident Sampling Requirements for Boiling Water Reactor Using the Consolidated Line Item Improvement Process," December 27, 2001.

5. Docket No. 50-397, Amendment No 1 to Facility Operating License NPF-21, Washington Public Power Supply System Nuclear Project No. 2, dated April 13, 1984.

6. Docket No. 50-397, Supplement No 5 to the Safety Evaluation Report for Washington Public Power Supply System Nuclear Project No. 2, dated April 13, 1984.

7. Safety Evaluation for Amendment No 106 to Facility Operating License NPF-69, Nine Mile Point Nuclear Station, Unit No. 2, Docket No 50-410, dated August 9, 2002.

LICENSE AMENDMENT REQUEST TO ELIMINATE REQUIREMENTS FOR POST ACCIDENT SAMPLING SYSTEM (PASS)
Attachment 1
Page 1 of

Proposed Technical Specification and Operating License Changes (mark-up)

5.5 Programs and Manuals

5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

3. Shall be submitted to the NRC in the form of a complete, legible copy of the entire ODCM as a part of, or concurrent with, the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include the Low Pressure Core Spray, High Pressure Core Spray, Residual Heat Removal, Reactor Core Isolation Cooling, hydrogen recombiner, process sampling, containment monitoring, and Standby Gas Treatment. The program shall include the following:

Insert 1

a. Preventive maintenance and periodic visual inspection requirements; and

b. Integrated leak test requirements for each system at 24 month intervals or less.

The provisions of SR 3.0.2 are applicable to the 24 month Frequency for performing integrated system leak test activities.

Deleted

5.5.3 Post Accident Sampling

~~This~~ program provides controls that ensure the capability to obtain and analyze reactor coolant, radioactive iodines, and particulates in plant gaseous effluents and containment atmosphere samples under accident conditions. The program shall include the following:

a. Training of personnel;

b. Procedures for sampling and analysis; and

(continued)

Insert 1

(the program requirements shall apply to the Post Accident Sampling System until such time as administrative controls provide for continuous isolation of the associated penetrations(s) or a modification eliminates the potential leakage path(s))

5.5 Programs and Manuals

5.5.3 Post Accident Sampling (continued)

c. Provisions for maintenance of sampling and analysis equipment.

5.5.4 Radioactive Effluent Controls Program

This program, conforming to 10 CFR 50.36a, provides for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;

b. Limitations on the concentrations of radioactive material released in liquid effluents from the site to unrestricted areas, conforming to 10 times the concentration values in Appendix B, Table 2, Column 2 to 10 CFR 20.1001 - 20.2402;

c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents pursuant to 10 CFR 20.1302 and with the methodology and parameters in the ODCM;

d. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas, conforming to 10 CFR 50, Appendix I;

e. Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days;

(continued)

(10) Thermal-Hydraulic Stability (Section 4.4.4, SER)

Prior to startup following the first refueling outage, the licensee shall provide for NRC staff review and approval a revised stability analysis.

(11) Shield Wall Deferral (Section 12.3.2, SSER #4, Licensee Amendment #7)

The licensee shall complete construction of the deferred shield walls and window as identified in Attachment 3, as amended by this license amendment.

(12) Alternate Remote Shutdown System (Section 7.4.2.3, SSER #1)

Prior to startup following the first refueling outage, the licensee shall install, test, and have operable the alternate remote shutdown system.

IC Deleted

(13) Post-Accident Sampling (TMI Item II.B.3, Section 9.3.2-4, SER, SSER #4, SSER #5)

Prior to May 1, 1994, the licensee shall install, test and have operational the reactor coolant dissolved gas grab sampling capability.

(14) Fire Protection Program (Generic Letter 86-10)

The licensee shall implement and maintain in effect all provisions of the approved fire protection program as described in Section 9.5.1 and Appendix F of the Final Safety Analysis Report (FSAR) for the facility thru Amendment #39 and as described in subsequent letters to the staff through November 30, 1988, referenced in the May 22, 1989 safety evaluation and in other pertinent sections of the FSAR referenced in either Section 9.5.1 or Appendix F and as approved in the Safety Evaluation Report issued in March 1982 (NUREG 0892) and in Supplements 3, issued in May 1983, and 4, issued in December 1983, and in safety evaluations issued with letters dated November 11, 1987 and May 22, 1989 subject to the following provision:

The license may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

Proposed Technical Specification and Operating License Pages (retyped)

5.0 ADMINISTRATIVE CONTROLS

5.5 Programs and Manuals

The following programs shall be established, implemented, and maintained.

5.5.1 Offsite Dose Calculation Manual (ODCM)

a. The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the radiological environmental monitoring program; and

b. The ODCM shall also contain the radioactive effluent controls and radiological environmental monitoring activities, and descriptions of the information that should be included in the Annual Radiological Environmental Operating and Radioactive Effluent Release reports required by Specification 5.6.2 and Specification 5.6.3.

c. Licensee initiated changes to the ODCM:

1. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:

(a) Sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s), and

(b) A determination that the change(s) maintain the levels of radioactive effluent control required pursuant to 10 CFR 20.1302, 40 CFR 190, 10 CFR 50.36a, and 10 CFR 50; Appendix I, and do not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations;

2. Shall become effective after review and acceptance by the Plant Operations Committee and the approval of the Plant General Manager; and

(continued)

5.5 Programs and Manuals

5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

3. Shall be submitted to the NRC in the form of a complete, legible copy of the entire ODCM as a part of, or concurrent with, the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include the Low Pressure Core Spray, High Pressure Core Spray, Residual Heat Removal, Reactor Core Isolation Cooling, hydrogen recombiner, process sampling (the program requirements shall apply to the Post Accident Sampling System until such time as administrative controls provide for continuous isolation of the assoicated penetration(s) or a modification eliminates the potential leakage path(s)), containment monitoring, and Standby Gas Treatment. The program shall include the following:

a. Preventive maintenance and periodic visual inspection requirements; and

b. Integrated leak test requirements for each system at 24 month intervals or less.

The provisions of SR 3.0.2 are applicable to the 24 month Frequency for performing integrated system leak test activities.

5.5.3 Deleted

(continued)

5.5 Programs and Manuals

5.5.4 Radioactive Effluent Controls Program

This program, conforming to 10 CFR 50.36a, provides for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;

b. Limitations on the concentrations of radioactive material released in liquid effluents from the site to unrestricted areas, conforming to 10 times the concentration values in Appendix B, Table 2, Column 2 to 10 CFR 20.1001 - 20.2402;

c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents pursuant to 10 CFR 20.1302 and with the methodology and parameters in the ODCM;

d. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas, conforming to 10 CFR 50, Appendix I;

e. Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days;

(continued)

5.5 Programs and Manuals

5.5.4 Radioactive Effluent Controls Program (continued)

f. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of 31 days would exceed 2% of the guidelines for the annual dose or dose commitment, conforming to 10 CFR 50, Appendix I;

g. Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the site boundary shall be limited to the following:

1. For noble gases: less than or equal to a dose rate of 500 mrems/yr to the total body and less than or equal to a dose rate of 3000 mrems/yr to the skin, and

2. For iodine-131, iodine-133, tritium, and for all radionuclides in particulate form with half lives > 8 days: less than or equal to a dose rate of 1500 mrems/yr to any organ;

h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;

i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;

j. Limitations on the annual dose or dose commitment to any member of the public due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190; and

k. Limitations on venting and purging of the primary containment through the Standby Gas Treatment System to maintain releases as low as reasonably achievable.

(continued)

(10) Thermal-Hydraulic Stability (Section 4.4.4, SER)

Prior to startup following the first refueling outage, the licensee shall provide for NRC staff review and approval a revised stability analysis.

(11) Shield Wall Deferral (Section 12.3.2, SSER #4, Licensee Amendment #7)

The licensee shall complete construction of the deferred shield walls and window as identified in Attachment 3, as amended by this license amendment.

(12) Alternate Remote Shutdown System (Section 7.4.2.3, SSER #1)

Prior to startup following the first refueling outage, the licensee shall install, test, and have operable the alternate remote shutdown system.

(13) Deleted

(14) Fire Protection Program (Generic Letter 86-10)

The licensee shall implement and maintain in effect all provisions of the approved fire protection program as described in Section 9.5.1 and Appendix F of the Final Safety Analysis Report (FSAR) for the facility thru Amendment #39 and as described in subsequent letters to the staff through November 30, 1988, referenced in the May 22, 1989 safety evaluation and in other pertinent sections of the FSAR referenced in either Section 9.5.1 or Appendix F and as approved in the Safety Evaluation Report issued in March 1982 (NUREG 0892) and in Supplements 3, issued in May 1983, and 4, issued in December 1983, and in safety evaluations issued with letters dated November 11, 1987 and May 22, 1989 subject to the following provision:

The license may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

List of Regulatory Commitments

The following table identifies those actions committed to by Energy Northwest in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments. Please direct question regarding these commitments to Ms. CL Perino, Licensing Manager at (509) 377-2075.

REGULATORY COMMITMENT	DUE DATE
Columbia Generating Station will maintain contingency plans for obtaining and analyzing highly radioactive samples of reactor coolant, suppression pool, and containment atmosphere. The contingency plans will be maintained in plant procedures. Establishment of contingency plans is considered a regulatory commitment.	Complete
Columbia Generating Station will maintain the capability for classifying fuel damage events at the Alert level threshold. This capability may utilize the normal sampling system and/or correlations of radiation readings to radioisotope concentrations in the reactor coolant. This capability is described in plant procedures. The capability for classifying fuel damage events at the Alert level threshold is considered a regulatory commitment.	Complete
Columbia Generating Station will maintain I-131 site survey detection capability, including the ability to assess radioactive iodines released to offsite environs, by using effluent monitoring systems or portable sampling equipment. This capability is described in plant procedures. The capability to monitor radioactive iodines is considered a regulatory commitment.	Complete